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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/563,200	01/03/2006	Herbert Gord	03/055 K	6474

7590 02/24/2009

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EXAMINER	
SANDERS, JAMES M	

ART UNIT	PAPER NUMBER
1791	

MAIL DATE	DELIVERY MODE
02/24/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/563,200	GORD ET AL.	
	Examiner	Art Unit	
	JAMES SANDERS	1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 January 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21* is/are pending in the application.

4a) Of the above claim(s) *12-21* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *03 January 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *1/3/06*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Applicant's election of claims 1-11 in the reply filed on 1/22/09 is acknowledged.

Claims 12-21 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 1/22/09.

Specification

1. The disclosure is objected to because of the following informalities: pg 7, lns 9-10 and 30-31 of the Specification recite "claims 7 to 11" and "claims 15 to 21", respectively. Reciting claim numbers in the Specification is improper. Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.

3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 1-3 and 5-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gord et al (WO 03/000060, already of record), and further in view of Reichel et al (US 2176925).

For claim 1, Gord et al teach a method for producing a seamless edible cellulose tubing from underivatized cellulose in which a solution of the underivatized cellulose in tertiary amine N-oxide, additives and water is extruded (pg 3 lns 29-32) from an annular die as tubing and is conducted downward through an air gap into a water bath, in order to solidify the cellulose and the additives and allow amine N-oxide to escape from the cellulose (pg 7 lns 1-34), in addition, the cellulose tubing is conducted out of the water bath, thereafter the tubing is passed through at least two wash sections and one plasticizing section and after exit from the plasticizing section is predried as wet tubing in the laid-flat state before it is dried, in the blown state, to-its final moisture (pg 9 lns 7-23).

Gord et al do not teach cleaning the tubing by spraying it with heated water, the tubing being transported up an incline during the spraying, after removal from the initial water bath.

However, in the same field of endeavor pertaining to making tubing for sausage casings, Reichel et al teach washing the tubing by spraying it with water as it is transported upward vertically, after removal from the initial bath (Figure and pg 5 lns 3-7).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Reichel et al with those of Gord et al for the benefit of making the cleaning process more efficient. Further, though the previous combination does not explicitly teach spraying with heated water, Gord et al do teach passing the tubing through 4 wash vats, while also increasing the temperature from one vat to the next up to from 60 to 70 C (pg 9 lns 7-23), and therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to spray with heated water.

For claims 2-3, 6-7 and 9-10, the previous combination does not explicitly teach the cellulose tubing is predried to a moisture of about 30 to 70% or 40 to 60% of the moisture of the wet tubing; or the cellulose tubing passes through a predrying zone two times, by being turned round by 180° at one end of the predrying zone; or the cellulose tubing passes vertically through the predrying zone; or the predrying takes place in a predrying zone of a length of up to about 12 m and is predried by air which is at a temperature up to about 130 °C; or the running speed of the cellulose tubing, the length of the predrying zone and the temperature of the air are adjusted to one another in such a manner that the moisture of the predried cellulose tubing at the exit from the predrying zone is about 40 to about 60 % of the moisture of the wet cellulose tubing.

However, since Gord et al do teach increasing the stability of the tubular film by drying it first in the non-inflated state using hot air (pg 7 lns 1-31), it would have been obvious to one of ordinary skill in the art at the time the invention was made to try to optimize the predrying process by such ways as predrying to a moisture of about 30 to 70% or 40 to

60% of the moisture of the wet tubing; and passing the tubing through a predrying zone two times, by being turned round by 180° at one end of the predrying zone; and passing the tubing vertically through the predrying zone; and performing the predrying in a predrying zone of a length of up to about 12 m and is predried by air which is at a temperature up to about 130 °C; and adjusting the running speed of the cellulose tubing, the length of the predrying zone and the temperature of the air to one another in such a manner that the moisture of the predried cellulose tubing at the exit from the predrying zone is about 40 to about 60 % of the moisture of the wet cellulose tubing, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. One would have been motivated to perform routine experimentation for the purpose of process optimization. Please see In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 for further details.

For claim 5, it is inherent that the tubing is shrunk by the predrying and its extensibility is decreased.

For claims 8 and 11, Gord et al teach the cellulose tubing passes horizontally through the predrying zone and the predried cellulose tubing is dried in the inflated state between two pinch-roll pairs by hot air to a final moisture of up to about 10 % of the moisture of the wet cellulose tubing (pg 9 lns 7-23).

5. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gord et al (WO 03/000060, already of record), further in view of Reichel et al, and further in view of Underwood et al (US 2901358).

The previous combination teaches the invention as discussed above.

The previous combination does not teach an impregnation solution is applied to the tubing inside of the predried tubing.

However, in the same field of endeavor pertaining to making food casing, Underwood et al teach passing the tubing between squeeze rolls to minimize any solution carryover, which Examiner notes reduces moisture content and is a method of predrying, and then introducing a chemical inside of the tubing to coat the surface (Figure and cl 1 ln 57 to cl 2 ln 16). Further, it is inherent that some of the coated chemical impregnates the tubing.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Underwood et al with those of Gord et al/Reichel et al for the benefit of chemically treating the inside of the tubing to further enhance the product.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Higgins et al (US 4115594) teach methods for extruding casing and methods of preparation. They teach partially drying and hardening the tubing by passing through a predryer.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES SANDERS whose telephone number is 571-270-7007. The examiner can normally be reached on Monday through Friday, 8 AM to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Del Sole can be reached on 571-272-1130. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JMS

/Joseph S. Del Sole/

Supervisory Patent Examiner, Art Unit 1791